Test Laboratory: UnionTrust Date: 8/19/2018

# System Check H2450

#### **DUT: Dipole 2450 MHz D2450V2**

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1 Medium: HSL2450 Medium parameters used: f = 2450 MHz;  $\sigma = 1.854$  S/m;  $\epsilon_r = 37.997$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.74, 4.74, 4.74); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

# **Configuration/Configuration/Area Scan (81x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.648 W/kg

# **Configuration/Configuration/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.16 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.498 W/kg; SAR(10 g) = 0.234 W/kgMaximum value of SAR (measured) = 0.657 W/kg

0.648

0.518

0.389

0.259

0.130

Test Laboratory: UnionTrust Date: 8/17/2018

# System Check H5200

### **DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5G Medium parameters used: f = 5200 MHz;  $\sigma = 4.703$  S/m;  $\varepsilon_r = 37.093$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### DASY5 Configuration:

- Probe: EX3DV4 SN3578; ConvF(5.44, 5.44, 5.44); Calibrated: 5/29/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

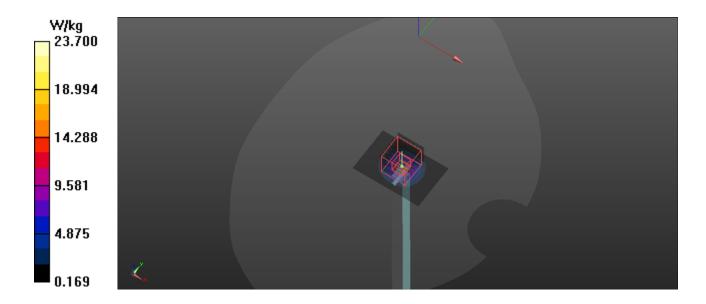
**Configuration/Area Scan (61x41x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 23.7 W/kg

Configuration/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 55.74 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 38.8 W/kg

SAR(1 g) = 8.35 W/kg; SAR(10 g) = 2.29 W/kgMaximum value of SAR (measured) = 23.6 W/kg



Test Laboratory: UnionTrust Date: 8/18/2018

# System Check H5600

#### **DUT: Dipole D5GHzV2**

Communication System: UID 0, \_CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.21$  S/m;  $\varepsilon_r = 36.221$ ;  $\rho = 1000$  kg/m<sup>3</sup>

# DASY5 Configuration:

- Probe: EX3DV4 SN3578; ConvF(4.75, 4.75, 4.75); Calibrated: 5/29/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

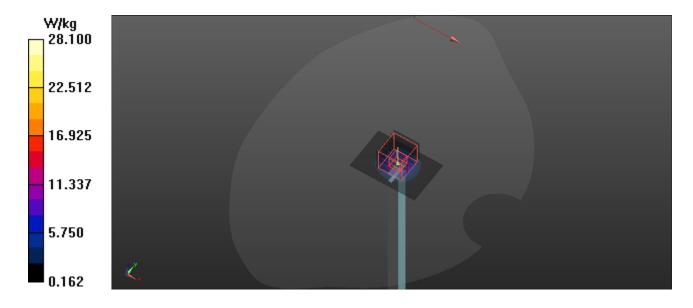
**Configuration/Area Scan (61x41x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 28.1 W/kg

**Configuration/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 55.45 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 48.2 W/kg

SAR(1 g) = 8.7 W/kg; SAR(10 g) = 2.5 W/kg

Maximum value of SAR (measured) = 28.1 W/kg



Test Laboratory: UnionTrust Date: 8/18/2018

# System Check H5800

#### **DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: HSL5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.442$  S/m;  $\varepsilon_r = 35.768$ ;  $\rho = 1000$  kg/m<sup>3</sup>

# DASY5 Configuration:

- Probe: EX3DV4 SN3578; ConvF(4.78, 4.78, 4.78); Calibrated: 5/29/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

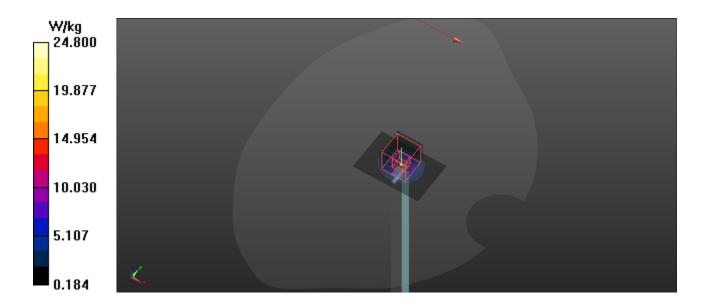
**Configuration/Area Scan (61x41x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 24.8 W/kg

Configuration/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 52.10 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 41.6 W/kg

SAR(1 g) = 8.28 W/kg; SAR(10 g) = 2.34 W/kgMaximum value of SAR (measured) = 24.3 W/kg



Test Laboratory: UnionTrust Date: 8/20/2018

# System Check B2450

#### **DUT: Dipole 2450 MHz D2450V2**

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1 Medium: MSL2450 Medium parameters used: f = 2450 MHz;  $\sigma = 2.028$  S/m;  $\epsilon_r = 52.823$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.57, 4.57, 4.57); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

# **Configuration/Configuration/Area Scan (81x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.613 W/kg

# **Configuration/Configuration/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.51 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.208 W/kgMaximum value of SAR (measured) = 0.615 W/kg

0.490 0.368 0.245 0.123 Test Laboratory: UnionTrust Date: 8/16/2018

# System Check B5.2G

# **DUT: Dipole D5GHzV2**

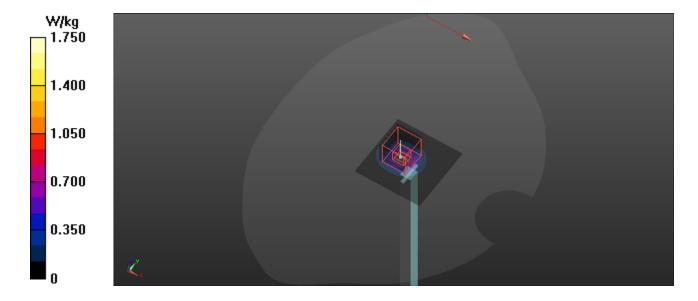
Communication System: UID 0, CW; Frequency: 5200 MHz; Duty Cycle: 1:1 Medium: MSL 5GHz Medium parameters used: f = 5200 MHz;  $\sigma = 5.244$  S/m;  $\epsilon_r = 49.469$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### DASY5 Configuration:

- Probe: EX3DV4 SN3578; ConvF(4.96, 4.96, 4.96); Calibrated: 5/29/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

**Configuration/Area Scan (61x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 1.75 W/kg

Configuration/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 15.58 V/m; Power Drift = -0.14 dB Peak SAR (extrapolated) = 2.98 W/kg SAR(1 g) = 0.756 W/kg; SAR(10 g) = 0.218 W/kg Maximum value of SAR (measured) = 1.86 W/kg



Test Laboratory: UnionTrust Date: 8/16/2018

# System Check B5.6G

# **DUT: Dipole D5GHzV2**

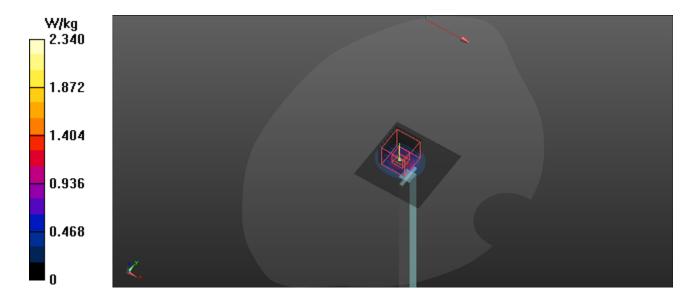
Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1 Medium: MSL 5GHz Medium parameters used: f = 5600 MHz;  $\sigma = 5.852$  S/m;  $\epsilon_r = 48.725$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### DASY5 Configuration:

- Probe: EX3DV4 SN3578; ConvF(4.22, 4.22, 4.22); Calibrated: 5/29/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

**Configuration/Area Scan (61x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 2.34 W/kg

Configuration/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 17.03 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 4.06 W/kg SAR(1 g) = 0.814 W/kg; SAR(10 g) = 0.264 W/kg Maximum value of SAR (measured) = 2.34 W/kg



Test Laboratory: UnionTrust Date: 8/17/2018

# System Check B5.8G

### **DUT: Dipole D5GHzV2**

Communication System: UID 0, CW; Frequency: 5800 MHz; Duty Cycle: 1:1 Medium: MSL 5GHz Medium parameters used: f = 5800 MHz;  $\sigma = 6.113$  S/m;  $\epsilon_r = 48.226$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### DASY5 Configuration:

- Probe: EX3DV4 SN3578; ConvF(4.34, 4.34, 4.34); Calibrated: 5/29/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

**Configuration/Area Scan (61x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 2.38 W/kg

Configuration/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 16.93 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 4.14 W/kg SAR(1 g) = 0.841 W/kg; SAR(10 g) = 0.274 W/kg Maximum value of SAR (measured) = 2.40 W/kg

